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(54) Laser-initiated ink-jet printing method and apparatus

(57) A printing device including a laser (10) for generating at least one laser beam, a controller, a print head (16) having a plurality of orifices (32), and an ink supply for supplying ink to the print head. The controller modulates the at least one modulated laser beam according to image data to be printed. The at least one modulated laser beam selectively generates a directional acoustic wave within the print head, thereby inducing an ink droplet to exit a selected one of the orifices onto a printing substrate. A print head including a single buffer chamber (26), a body (28), and a single ink chamber (30). The buffer chamber stores a buffer liquid therein with the body forming one wall of that chamber. The ink chamber shares the body as a wall. The ink chamber stores ink therein and has a plurality of orifices on a wall opposite to the body.

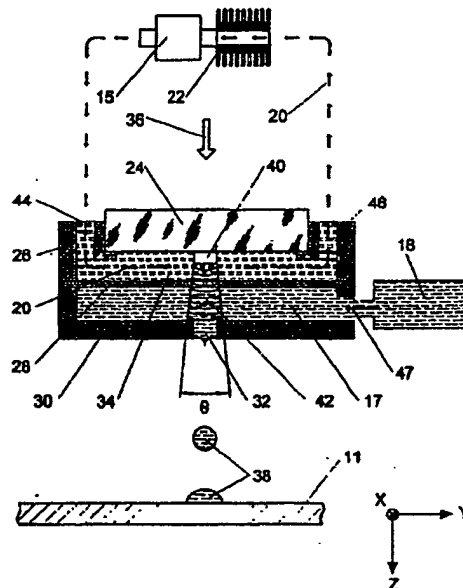


Figure 3

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EUROPEAN SEARCH REPORT

Application Number
EP 99 30 9013

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A	WO 97 29913 A (MAXIMOVSKY SERGEI NIKOLAEVICH ; RADUTSKY GRIGORY A (RU)) 21 August 1997 (1997-08-21) * the whole document * & EP 0 947 324 A 6 October 1999 (1999-10-06) * column 4, line 50 - column 6, line 30; figures *	5,8,20	
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Place of search THE HAGUE		Date of completion of the search 8 February 2001	Examiner Meulemans, J-P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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